

AMERICAN MUSEUM NOVITATES

Number 572

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

Oct. 10, 1932

59.57, 89 P (87)

PIERIDÆ FROM THE REGIONS OF MT. DUIDA AND MT. RORAIMA

BY F. MARTIN BROWN

The material reported herein was collected by Mr. G. H. H. Tate and his associates of the Tyler Duida Expedition, 1928–1929, and of the Day Roraima Expedition of 1927–1928. The first-mentioned expedition brought back to the American Museum about ninety specimens of Pieridæ, the latter only about one-fifth as many. However, each collection contained specimens of an undescribed species of the genus *Catantix*. Excellent brief descriptions of the regions visited are to be found in two recent articles published in the January, 1930, issue of *The Geographical Review*.¹

The Hesperiidæ have been reported upon by Mr. E. L. Bell, in *American Museum Novitates*, No. 555.

THE TYLER DUIDA EXPEDITION

The areas visited may be divided into two groups: the Rio Negro Forest area and the Cerro Duida area.

RIO NEGRO FOREST AREA

During the advance up the Rio Negro toward Mt. Duida in September, and the return journey the following March, occasional collecting was done. Most of this took place either early in the morning or toward sunset, but a few specimens were taken during the day from the boats.

CERRO DUIDA AREA

Five types of localities are included in this area:

(1)—Esmeralda and Esmeralda Savanna, comprising the lowlands along the Orinoco River and forest and riverside savannas, which differ considerably in vertebrate fauna from the typical savanna at the foot of the mountains. Elevation about 400 feet.

¹Tate and Hitchcock, 'The Cerro Duida Region of Venezuela,' XX, pp. 31–52; and Tate, 'Notes on the Mount Roraima Region,' XX, pp. 53–68.

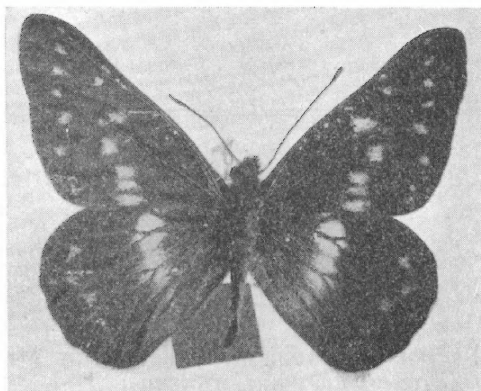


Fig. 1. Upper side of *Catasticta duida*, new species. Male holotype, $\times 11/10$.

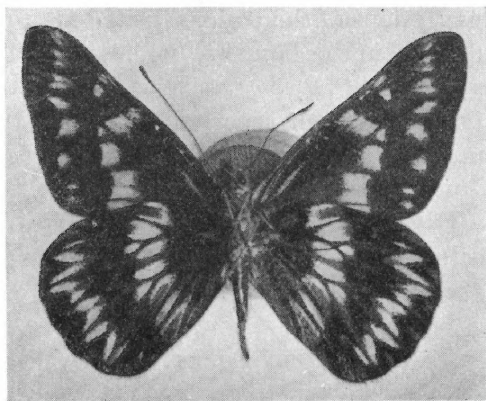


Fig. 2. Under side of *Catasticta duida*, new species. Male holotype, $\times 11/10$.

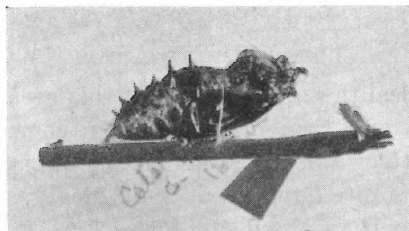


Fig. 3. Chrysalis of *Catasticta duida* (?), new species. $\times 11/10$.

(2)—Lowlands near the mountains, consisting mainly of savannas and forest. Name of station, Middle Camp.

(3)—Foothill Region, generally humid and clothed with tropical forest.

(4)—Foothill Region, local arid ridges.

(5)—Summit, wet subtropical condition.

SPECIES FROM DUIDA

Catasticta duida, new species

Figures 1 to 3

Allied to *Catasticta amastris* Hewitson.

UPPER SURFACE.—Intermediate to *C. amastris* Hewitson and *C. bithyna* Roeber. Uniform, velvety black with the following white markings: an irregular submarginal row of small weak spots on both wings; and an irregular median band broken into rectangular spots on the forewing and extended on the hind wings to the anal nervule as a band within the cell, crossed by black nervules. Base of hind wing slightly grayish.

UNDER SURFACE.—Forewing, as above, but with the white spots larger; three yellow marginal dashes at the apex and the three white apical spots of the marginal band each containing a yellow dash; hind wings similar to *suasa* Roeber, with the appearance of five bands of color, three velvety brown-black and two white, the inner white band rather regular, the outer composed of angular spots, with the usual yellow markings; the marginal yellow spots are small and not triangular in shape; the basal and thoracic spots are yellow, not red. Length of forewing 29 mm.

The females differ slightly in the wing-shape.

TYPES.—Holotype, male, Mt. Duida, Venezuela, Dec. 9, 1928, alt. 6500 ft.; allotype, female, Mt. Duida, Venezuela, Dec. 9, 1928, alt. 6500 ft. Paratypes: five males, Mt. Duida, Venezuela, Dec. 9, 1928, alt. 6500 ft.; one male, Mt. Duida, Venezuela, Dec. 16, 1928, alt. 6500 ft.; one female, Mt. Duida, Venezuela, Jan. 5, 1929, alt. 6500 ft.; and one male, base of cliff, Mt. Roraima, Brazil, Oct. 28, 1927, alt. 7400 ft.; in collection of The American Museum of Natural History.

This species differs from *amastris* Hewitson, on the upper surface, in the extensions of the white markings. On the underside *duida* differs in the white ground color of the hind wings as compared with the yellowish ground color of *amastris*. From *bithyna* Roeber it differs above in the restriction of the white markings and beneath in the totally different types of hind wing markings, which in *bithyna* are similar to the *pitana* group.

All of the Duida specimens were collected on "Ridge 23B" (see Geographical Review, XX). A chrysalis was found on this ridge. It may belong to this species. In general structure it resembles the chrysalis of *Pereute* but differs markedly in the head appendages.

***Appias drusilla* Cramer**

One male, Rio Negro, between Tatu and Pirapucu, Brazil, Sept. 24, 1928; one male, Rio Negro, San Carlos, Venezuela, Sept. 24, 1928; four males, Mt. Duida, Middle Camp, forest, Nov. 6, 1928, alt. about 600 ft.; two males, Mt. Duida, Middle Camp, forest, Nov. 13, 1928, alt. about 600 ft.

Two of the specimens taken September 6, 1928, show great reduction of the black apical area of the forewing; all of the others are typical. The Mt. Duida specimens were taken in the light-trap or settling about the moist spots in the clearing.

***Daptonoura lycimnia* form *moesia* Fruhstorfer**

One male, Mt. Duida, Foothills Camp, forest, Nov. 15, 1928, alt. 1000 ft. A typical Amazon forest form.

***Anteos menippe* Huebner**

Three males, Rio Negro, San Carlos, Venezuela, Sept. 24, 1928; one male, Mt. Duida, Esmeralda, Oct. 29, 1928, alt. 325 ft.; one male, Mt. Duida, Esmeralda Savanna, Nov. 2, 1928, alt. 325 ft.; three males, Mt. Duida, Foothills Camp, forest, Nov. 15, 1928, alt. about 1000 ft.

The Foothills Camp specimens were taken on a small beach on the Caño Base.

***Eurema albula* form *sinoë* Godart**

One male and one female, Mt. Duida, Caño Base Playa forest trail, Nov. 14, 1928, alt. about 1000 ft.

***Eurema dina leuce* Boisduval**

One male, Mt. Duida, Foothills Camp, forest, Nov. 19, 1928, alt. about 1000 ft.

***Phœbis philea philea* Linnæus**

One male, Mt. Duida, Esmeralda Savanna, Oct. 27, 1928, alt. 325 ft.; one male, Mt. Duida, Esmeralda Savanna, Oct. 29, 1928, alt. 325 ft.

***Phœbis argante argante* form *hersilia* Cramer**

One male, Rio Negro, Santa Isabel Brazil, Sept. 8, 1928; two males, Rio Negro, San Carlos, Venezuela, Sept. 24, 1928; one male, Mt. Duida, Esmeralda, Oct. 27, 1928; two males, Mt. Duida, Esmeralda, Nov. 21, 1928.

***Phœbis rurina* Felder**

Five males, Mt. Duida, Foothills Camp, forest, Nov. 15, 1928, alt. about 1000 ft.

Specimens taken on the damp sands of a small beach on the Caño Base.

***Phœbis (Rhabdodryas) trite trite* Linnæus**

One male, Rio Casiquiare, between Cururi and Quemapure, Venezuela, Sept. 27, 1928; three males, Mt. Duida, Esmeralda Savanna, Oct. 27, 1928, alt. 325 ft.; one female, Mt. Duida, Foothills Camp, forest, Nov. 19, 1928, alt. about 1000 ft.

The Foothills Camp specimen is badly battered.

***Aphrissa statira statira* Cramer**

One male and one female, Rio Negro, Santa Izabel, Brazil, Sept. 8, 1928; one male, Rio Negro, 35 miles above Santa Izabel, Sept. 10, 1928; one male, Rio Negro, Yucabi, Brazil, Sept. 13, 1928; fourteen males, Mt. Duida, Esmeralda Savanna, Oct. 27, 1928, alt. 325 ft.; eleven males, Mt. Duida, Esmeralda Savanna, Nov. 2, 1928, alt. 325 ft.; eight males, Mt. Duida, Middle Camp, forest, Nov. 13, 1928, alt. about 600 ft.; one male, Mt. Duida, Ridge 23B, Jan. 9, 1929, alt. 6500 ft.; one female, Mt. Duida, Summit, Savanna Hills, Feb. 2, 1929, alt. 4500 ft.

***Aphrissa statira statira* form *wallacei* Butler**

One male, Mt. Duida, Esmeralda Savanna, Nov. 2, 1928, alt. 325 ft.

***Aphrissa statira statira* aberration male *etiolata* Forbes**

One male, Mt. Duida, Esmeralda Savanna, Oct. 27, 1928, alt. 325 ft.; one male, Mt. Duida, Middle Camp, forest, Nov. 13, 1928, alt. 600 ft.

***Dismorphia viridifascia* Butler**

One male, Mt. Duida, Summit, Central Camp, Valley Head, Jan. 2, 1929, alt. 5000 ft.

This individual differs from typical Central American specimens. It has the spots on the upper surface of the forewing almost obliterated, and the green area on the hind wing slightly reduced. Incidentally, this is the only South American specimen that I have seen. It is apparently rare in Central America and is restricted to the slopes of the highest

volcanic peaks of Panama and Costa Rica, such as Chiriqui and Irazu. The Central American specimens, which I have seen, were taken below 8000 ft.

THE DAY RORAIMA EXPEDITION

Five camps were occupied in the vicinity of the mountain: Arabupu, 4200 ft., on the river of the same name; Paulo, 4000 ft., on the Cuquenam River, eight miles southwest of the plateau; Philipp Camp, 5200 ft.; Rondon Camp, at the base of the talus, 6900 ft.; and Summit Camp, 8600 ft. Arabupu was the only good collecting place for butterflies.

Nine days of the return trip to Georgetown, British Guiana, were spent at Anundabaru, on the headwaters of the Potaro River, about one hundred miles east of Mt. Roraima.

SPECIES FROM RORAIMA

Catasticta duida Brown

One male, Mt. Roraima, at the base of the cliff, Oct. 28, 1927, alt. 7400 ft.

One of the paratypes of the species.

Eurema albula Cramer

One male, Mt. Roraima, Arabupu, Dec. 26, 1927, alt. 4200 ft.

Eurema albula form **sino** Godart

One male, Mt. Roraima, Paulo, Nov. 5, 1927, alt. 4000 ft.; one male, Mt. Roraima, Arabupu, Dec. 31, 1927, alt. 4200 ft.

Phœbis philea philea Linnæus

Five males, Mt. Roraima, Arabupu, Dec. 1927, alt. 4200 ft.

Phœbis rurina Felder

Three males, Mt. Roraima, Arabupu, Dec. 1927, alt. 4200 ft.

Aphrissa statira statira Cramer

Two males, Mt. Roraima, Arabupu, Dec. 1927, alt. 4200 ft.

SPECIES FROM ANUNDABARU

Dismorphia pinthæus Linnæus

One male, Anundabaru, Potaro River, Jan. 1928, alt. 2000 ft.

Appias drusilla Cramer

One male, Anundabaru, Potaro River, Jan. 1928, alt. 2000 ft.

There are two interesting species listed from these mountains: one, the new *Catantixia duida*, belonging to a strictly Andean group of the genus; the other, the Central American *Dismorphia viridifascia*, on Mt. Duida. All of the other species are commonly found throughout northern South America.

